

Weatherization is a Natural Choice for Montana

Montana's Glacier National Park is renowned for its natural beauty and diverse ecological resources. The park is the only location in the continental United States where grizzly bears, mountain lions, and wolves occur naturally. Montana values the park's diverse population and strives to protect its vulnerable residents from external threats. Outside the park, Montana promotes policies and programs that improve life for the state's most vulnerable residents: low-income households. A key component in this effort is Montana's partnership with the U.S. Department of Energy (DOE) to deliver the Weatherization Assistance Program (Weatherization). Weatherization reduces energy costs for low-income households by increasing the energy efficiency of their homes, while ensuring their health and safety.

Low-income households typically spend 14% of their total annual income on energy, compared with 3.5% for other households. This burden becomes even more unmanageable when energy prices soar or temperatures drop. Low-income families often cut back on other necessities to pay their energy bills. Weatherization reduces home energy consumption, which provides a permanent boost to the household's budget.

Weatherization agencies also safeguard the health and safety of the clients they serve. Laurie Miller*, from Bozeman, was struggling to make ends meet when her job status was reduced to part-time. She was also concerned for her family's safety after a faulty hot water heater started a fire in her mobile home. Weatherization replaced the hazardous hot water heater and improved the energy efficiency of her aging home, just in time for winter. Laurie wrote, "Thank you from the bottom of my heart."

Montana's Weatherization Program prioritizes services to the elderly, people with disabilities, and families with children. These low-income households are often on fixed incomes or rely on income assistance programs and are most vulnerable to volatile changes in energy markets. Weatherization measures provide long-term relief for low-income families.

NATIONAL WEATHERIZATION PROGRAM

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| Homes weatherized in 1999 | 68,000 |
| DOE allocations in 1999 | \$135 million |
| Average annual energy cost savings per household | \$300 |
| Average space heating savings | 25-30% |
| Energy benefits returned for every \$1 invested | \$2.10 |
| Jobs supported | 7,000 |

MONTANA

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| Homes weatherized in 1999 (with DOE \$) | 995 |
| DOE funding in 1999 | \$1.5 million |
| Clients served in 1999 | 4,082 |
| Elderly | 9% |
| People with disabilities | 8% |
| Families with children | 24% |

DIGGING A LITTLE DEEPER

Early settlers came to Montana, not for the beautiful scenery or wildlife, but for gold. In 1862, a group of prospectors started sifting through a creek bed swarming with grasshoppers. Undeterred by the pests, they dug deeper and found part of the biggest gold strike in Montana's history. A similar sense of determination and desire to excel drives today's Weatherization Program. Agencies continue to integrate new technologies and advanced techniques to achieve greater energy savings.

Montana's Department of Public Health and Human Services administers the Weatherization Program and a network of 13 local agencies delivers energy efficiency services to every county in the state. In recent years, the state significantly bolstered the size and effectiveness of its low-income energy programs by implementing Universal System Benefits Programs. Natural gas utilities are required to apply no less than 47% of their annual revenues to low-income weatherization and bill assistance; electric utilities are required to apply annually no less than 41% of their 1999 revenues. In 1999, Montana weatherized 995 homes with DOE funds and an additional 976 homes with leveraged funds.

Weatherization crews use computerized energy audits and advanced diagnostic equipment, such as the blower door and digital manometer, to determine the most cost-effective energy efficiency measures appropriate for each home. Montana technicians test heating units and appliances for carbon monoxide, an odorless, colorless gas that can be deadly in large quantities. These skilled technicians are always willing to "dig deeper" to identify and solve a complex energy problem.

After performing diagnostic tests and conducting the audit, weatherization measures are installed. Typical weatherization services include installing insulation; sealing and repairing ducts; cleaning and repairing heating systems; and mitigating heat loss through windows, doors, and other infiltration points. Clients are also educated on the proper use and maintenance of the measures installed.

SPINNING A WEB OF BENEFITS

Glacier National Park's ecosystem is tightly linked: when one element is changed, the entire park feels the impact, for better or worse. Montana communities are also closely knit.

Weatherization measures impact low-income families by reducing energy costs and improving health and safety conditions. These benefits ripple out to the surrounding community.

Dorothy Silvers*, an elderly homeowner in Missoula, was thrilled with the immediate increase in warmth after her home was weatherized. She wrote a letter to her weatherization agency stating, "I want to express my sincere thanks for the money, time, and equipment... I deeply appreciate the expense taken on my behalf. I hope that in the future I can contribute to this system to aid another person who may need it as I did."



The gauge on the blower door indicates air infiltration.

Weatherization measures reduce energy bills for low-income families and keep money in the local economy that would typically be exported out to pay for energy. In addition, reducing residential energy demand decreases electricity generation and avoids emissions of nitrogen oxides, sulphur dioxide, and other pollutants. This improves local air quality and reduces adverse health effects, particularly asthma.

WEATHERIZATION WORKS!

Weatherization produces an impressive range of benefits for low-income households and communities. Nationally, for every \$1 invested in the program, Weatherization returns \$2.10 in energy-related benefits. Weatherization measures reduce national energy consumption and curb demand for imported oil. Weatherization works for Montana and America!

**Names have been changed to protect the privacy of the subjects.*



TO LEARN MORE ABOUT THE WEATHERIZATION ASSISTANCE PROGRAM, CONTACT:

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Visit the Weatherization Web site at: www.eren.doe.gov/buildings/weatherization_assistance
or call the Energy Efficiency and Renewable Energy Clearinghouse at: 1-800-DOE-3732



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